

NEW SPECIES AND GENERA OF INDIAN *GEOMETRIDAE*.

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## SUBFAMILY PSEUDOTERPNIÆ.

**Psilotagma** gen. nov.

*Forewings* with costa straight for  $\frac{1}{2}$ , more convex before apex, which is rounded; hindmargin entire, obliquely rounded.

*Hindwings* with hindmargin rounded, entire.

Palpi porrect, but quite short, not reaching beyond front of face; tongue present; antennae of ♂ simple, as in *Actenochroma* Warr.; hind tibiae and tarsi short, with out spurs; neuuration normal.

Type: *Psilotagma decorata* sp. nov.

Distinguished from *Actenochroma* Warr. by the entire hindmargins of both wings, and from *Epipristis* Meyr. by the difference in size and markings.

**Psilotagma decorata** sp. nov.

*Forewings* pale ochreous with a slight greenish tinge, thickly dusted with blackish atoms; costa dotted minutely with dark; first line indicated by a dark spot on costa; cell spot linear, dark, very oblique; exterior line black, starting from a black costal spot, running outwards till opposite the cell, then running inwards parallel to hindmargin, and indicated by black dots on the veins; beyond it are five oval red spots, two subcostal with a dark greyish blotch on costa above them, two contiguous at anal angle, and one a little above them; extreme hindmargin tinged with olive and grey, the veins darker; fringes glossy, chequered light and dark, with black spots at base between the veins.

*Hindwings* the same, but the second line less distinct, and followed by several irregular red spots.

*Head, thorax, and abdomen* ochreous.

*Underside* whitish with the cell spots large, round, and black; a submarginal interrupted blackish band, and the apical region of forewings blackish with the apex itself paler.

Expanse of wings: 50 mm.

One *male* from Bhotan.

## SUBFAMILY GEOMETRINÆ.

**Thalerura veninotata** sp. nov.

Closely allied to *T. acutissima* Wlk. and *T. goniaris* Feld.; ground colour dull green.

*Forewings* with costa narrowly yellow, dotted with purple towards apex ; the two lines indicated only by white dots on the veins ; the second decidedly beyond the middle of the wing.

*Hindwings* the same, but without the basal line.

Discal marks of both wings linear, darker green ; fringes yellow, with a fine dark purple basal line ; angle of the hindwings with a few purple atoms.

*Head, thorax, and abdomen* concolorous ; vertex white ; face and palpi reddish brown.

*Underside* pale glaucous green ; fringe line represented by dark spots or lines between the veins.

Expanse of wings : 36 mm.

One *male* from the Khasia Hills.

#### SUBFAMILY HYDRIOMENINÆ.

##### *Collix stellata* sp. nov.

The same size as *C. ghosha* Wlk., but duller, blackish grey, not varied with any fuscous tint, and distinguished at once by the subterminal line on both wings, which is represented by a regular series of small white spots.

One *male* from the Khasia Hills.

##### *Ecliptopera* gen. nov.

*Forewings* elongate ; costa gradually arched till a little before apex, then strongly convex ; apex bluntly produced, almost subfalcate ; hindmargin oblique, slightly sinuous below apex ; anal angle squared.

*Hindwings* irregularly kite-shaped, the two angles rounded, but prominent, the hindmargin between them straight, with a slight elbow towards the anal angle.

Palpi, antennae, and anal tuft of ♂ as in *Urolophia* ; face not rounded as in that genus, but obliquely flat, the lower part produced into a short point ; venation as in *Urolophia* Warr.

Type : *Ecliptopera triangulifera* Moore (*Eustroma*).

##### *Ecliptopera rectilinea* sp. nov.

*Forewings* dark umber-brown, darker than in *triangulifera* Moore, the ground colour forming three patches, one rhomboidal at base, edged by the basal line, which is white and slender—this runs obliquely outward from the costa, turns at a right angle perpendicularly to the inner margin, before which it is again diverted obliquely backwards ; the second patch is on the inner margin, shaped like a bird's head, with a dark spot or eye in the centre ; the third conical on the costa, the apex of the cone directed straight towards the anal angle—this is edged on both sides by a distinct creamy white line, followed by two fine brown lines, with an equally fine light line between them, and succeeded by a second creamy white line ; from the apex of the

wing a curved broad white line runs to above the anal angle, enclosing on the hindmargin an elongate lunular dark brown marking ; between this and the outer edge of the costal cone is another fine whitish line, running to the anal angle, and somewhat undulating in its lower course ; all these lines meet in a pale confused space at the anal angle. Fringe pale with darker central line, preceded by a dark line, which is itself preceded by a straight white line.

*Hindwings* pale ochreous grey with faint indications of pale curved submarginal lines.

Palpi brown, white in front ; face brown, finely edged laterally with white ; *thorax* brown with whitish centre ; *abdomen* brown with white dorsal line and white segmental rings.

*Underside* whitish ochreous, with indications of dark transverse lines towards the costa, with the fringe dark below the apex, and with a squarish brown blotch on the three median nervules.

*Hindwings* with a large dark discal spot, which shows through on the upper-side.

Expanse of wings : *male*, 42 to 46 mm.

Several examples from the Khasia Hills ; also one specimen from S. Celebes, which cannot be separated from the Indian form.

#### **Photoscotosia stigmatica** sp. nov.

*Forewings* fuscous ; basal area, central fascia, and marginal area darker ; central fascia with a small subcostal tooth, and four blunt convexities on the outer edge ; inner edge inangulated on the median vein ; formed of a succession of dark fuscous and paler undulating lines ; cell spot large, linear, very oblique, preceded by a subquadrate brown spot reaching from the costa to the median vein ; a dark subapical spot, obliquely edged from the apex ; fringe fuscous.

*Hindwings* orange, broadly white along the costa, smoky brown along inner margin, and fuscous from anal angle to middle of hindmargin ; fringe of hindwings orange round the apex, fuscous from the radial to anal angle.

*Head, thorax, and abdomen* dark fuscous.

*Underside* glossy ochreous, in the forewings tinged with grey towards the base and apex, in the hindwings with orange ; cell spots indistinct.

Expanse of wings : 50 mm.

One *male* from Darjeeling, from Dr. Lidderdale's collection. The forewings have the tuft of hairs fulvous, and bed of black scales along the first median nervule.

#### SUBFAMILY ASCOTINAE.

#### **Hemerophila lignata** sp. nov.

*Wings* uniform dull wood brown.

*Forewings* with the two lines finely black, the first bluntly biangulated below the costa as in *H. subplagiata* Wlk., and, as in that species, approaching the second line

below the middle, the first line preceded and the second followed immediately by a blackish brown shade.

*Hindwings* with the submarginal line as in *H. subplagiata*.

*Underside* dull cinereous, peppered all over with fuscous, with no dark fascia, but with all the lines finely depicted, and the second immediately preceded by an additional denticulated line; fringes below tinged with reddish; cell spots in both wings large and distinct.

Expanse of wings: 36 to 42 mm.

A good series of *males* from the Khasia Hills. Distinguished by the uniform brown colour of the upperside, and the absence of dark fascias on the underside.

#### SUBFAMILY ENNOMINAE.

##### *Hyposidra talaca* ab. *khasiana* nov.

Like *talaca* Wlk., but more thinly scaled; pale mouse colour, with a pearly tinge; markings as in *talaca*, but generally very faint and indistinct; fringe a little darker, pinkish, or brownish. *Underside* also always paler.

Nine *males* from the Khasia Hills.

#### APPENDIX.

I take this opportunity of rectifying some errors which appeared in my paper in the NOVITATES ZOOLOGICAE, Vol. I., No. 2.

At p. 380 appears a new genus, *Archaeopseustes*, for *Abraxas amplificata* Wlk. This must be erased. The species belongs to the genus *Terpsia* H.S., comprised in the subfamily *Pseudoterpsinac*.

At p. 399 the proposed new generic name *Callurapteryx* must give place to Walker's *Rotiaria*, Cat. xxiii., p. 827, the type of which genus, *argentina*, in the Oxford Museum, I have lately been able to examine.

At p. 414 the new genus *Omophyseta* must yield to *Potera* Moore. The type of *P. marginata* Moore, from Tenasserim, has hitherto been unique; but by comparison with some specimens now in the British Museum, from Mergui, it is shown to be very closely allied to, and generically, if not specifically, identical with *triseriaria* H.S., which I made the type of *Omophyseta*.

At p. 416 the type of *Pogonopygia* is given as *Abraxas khasiana* Swinhoe. This was owing to an erroneous identification. Swinhoe's *A. khasiana* is merely a synonym of Butler's *Abraxas elegans*, which I made the type of the genus *Dilophodes*. The real type of *Pogonopygia* is a species hitherto undescribed, for which I propose the name *nigralbata*, and here insert the description:—

##### *Pogonopygia nigralbata* sp. nov.

*Forewings* white, markings blackish; basal area occupied by seven or eight irregular-sized blotches; central area containing a large oblong blotch on the inner

margin, with two contiguous blotches obliquely above it, more or less connected with three roundish costal blotches, of which the middle one embraces the round discal spot—this central area is bordered by an irregular white fascia-form space on either side, the outer one being broader and more distinct; hindmarginal area black, traversed by a pale (whitish) subterminal line, which forms a right angle just above the anal angle, and cut up into two series of parallel squarish blotches by the whitish veins, the inner series being twice as long as the outer, except in cells three and four, where they are reduced in size, and the preceding white fascia consequently widened; fringes black.

*Hindwings* with the marginal area as in forewings; rest of the wing white, with a black basal and costal blotch, a round discal spot, and an irregular blotch on inner margin towards the anal angle—a smaller spot is visible between the discal and basal spots; fringe of hindwings paler than of forewings.

*Underside* like upper; pectus, top of face, and thorax yellowish; face blackish; palpi black; top of head whitish; abdomen whitish, tinged with ochreous, with a row of large black spots on either side of the centre; thorax with large round black spots; tufts of abdomen of ♂ greyish black; apex of abdomen of ♀ yellow; legs dull greyish, mixed with whitish and ochreous.

Expanse of wings: 60 mm.

Many examples from Japan and Central China, and two from the Khasia Hills.

At p. 417, for *Abraxas intermedia* sp. nov. read *Abraxas capitata* sp. nov.; and at p. 418 erase the description of *A. determinata*, which is really identical with *Abraxas intermedia* Warr., *P. Z. S.*, 1888, p. 324.

At p. 433 *Varisa interlata*, described as new, is the ♀ of *Meis vagans* Moore.